Applied Solids Physics A Surfaces

Volume A 53 1991

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PHYSICS AND ASTRONOMY CLASSIFICATION SCHEME (PACS)

Shortened version for use in classifying papers for Applied Physics

General

- Mathematical methods in physics
- Measurement science and metrology
- 07 Specific instrumentation
 - 07.60 Optical instruments and techniques, detection of radiation
 - 07.65 Optical spectroscopy and spectrometers
 - 07.75 Mass spectrometers and mass-spectroscopy techniques
 - 07.80 Electron and ion microscopes and spectrometers; techniques 07.85 X-ray and gamma-ray instruments and techniques

Atomic and molecular physics

- Atomic spectra and interactions with photons
- Molecular spectra and interactions of molecules with
- Atomic and molecular collision processes and interactions
- Experimentally derived information on atoms and 35 molecules
- Studies of special atoms and molecules (macro- and 36 polymer molecules, clusters)

Fundamental areas of phenomenology (including applications)

- **Electricity and magnetism**
- Optics (see also 78)
 - 42.10 Propagation and transmission in homogeneous media
 - 42.20 Propagation and transmission in inhomogeneous media
 - 42.30 Optical information, image formation and analysis
 - 42.40 Holography
 - 42.50 Quantum optics
 - 42.55 Laser processes
 - C Pumping mechanisms
 - E Molecular gas lasers (CO2, CO, N2O, formaldehyde)
 - G Excimer lasers
 - H Atomic, ionic, and other gas lasers
 - M Laser action in liquids and organic dyes
 - P Laser action in semiconductors
 - R Laser action in solid-state lasers
 - T Free-electron lasers
 - 42.60 Laser systems and laser-beam applications
 - B Design of specific laser systems
 - D Laser resonators, cavities, and amplifiers
 - E Laser beam deflection and focusing
 - F Laser beam modulation, mode locking, and tuning
 - 42.65 Nonlinear optics
 - 42.68 Atmospheric optics
 - 42.70 Optical materials
 - 42.80 Optical devices, techniques, and applications (including fiber and integrated optics)
- 43 Acoustics (see also 62)

Fluids, plasmas, and electric discharges

52 Physics of plasmas and electric discharges

Condensed matter: structure, mechanical and thermal properties

- Structure of liquids and solids; crystallography
 - (for surface structure, see 68.35; for thin-film structure, see 68.55)
 - 61.10 Determination of structures
 - 61.12 Neutron determination of structures
 - 61.14 Electron determination of structures
 - 61.16 Other determination of structures 61.20 Liquid structures

 - 61.30 Liquid crystals
 - 61.40 Amorphous and polymer materials, glasses
 - 61.70 Defects in crystals
 - 61.80 Radiation damage and other irradiation effects
- Mechanical and acoustical properties of condensed
- Lattice dynamics and crystal statistics
- Phase equilibria, and phase transitions Thermal properties of condensed matter
- Transport properties of condensed matter (nonelectronic) 66.30 Diffusion and ionic conduction in solids

- Surfaces and interfaces; thin films and whiskers
 - 68.10 Fluid surfaces and fluid-fluid interfaces
 - 68.15 Liquid thin films
 - 68.35 Solid surfaces and solid-solid interfaces
 - (including bicrystals)
 - 68.45 Solid-fluid interfaces 68.55 Thin films: growth, structure, epitaxy and nonelectronic
 - properties
 - 68.65 Layer structures, intercalation compounds, and superlattices: growth, structure, and nonelectronic properties
 - 68.70 Whiskers and dendrites: growth, structure, and nonelectronic properties

Condensed matter: electronic structure, electrical, magnetic, and optical properties

- **Electron states**
- **Electronic transport**
 - 72.15 Electronic phenomena in metals and alloys
 - 72.20 Conductivity phenomena in semiconductors and insulators
 - 72.40 Photoconduction and photovoltaic effects
 - 72.50 Acoustoelectric effects
 - 72.60 Mixed conductivity and conductivity transitions
 - 72.70 Noise processes and phenoma
- Electronic structure and electrical properties of surfaces, interfaces, and thin films
 - 73.20 Electronic surface states
 - 73.25 Surface conductivity
 - 73.30 Surface double layers, Schottky barriers, and work functions
 - 73.40 Interfaces
 - 73.60 Electronic properties of thin films
- Superconductivity
- 74.70 Superconducting materials
- Magnetic properties and materials
- 75.70 Magnetic films and plates
- Magnetic resonances and relaxation; Mössbauer effect
- Dielectric properties and materials
- 77.55 Dielectric thin films
- **Optical properties**
 - 78.30 Infrared and Raman spectra
 - 78.65 Optical properties of thin films 78.70 X-ray spectra and positron annihilation
- Electron and ion emission by liquids and solids; impact
 - phenomena
 - 79.20 Impact phenomena (including electron spectra and sputtering)
 - 79.40 Thermionic emission
 - 79.60 Photoemission and photoelectron spectra
 - 79.70 Field emission and field ionization

Cross-disciplinary physics

- Materials science
 - 81.10 Methods of crystal growth and purification
 - 81.15 Methods of thin-film deposition Z Laser deposition methods
 - 81.40 Treatment of materials and its effect on
 - microstructure and properties
 - Z Laser machining
 - 81.60 Corrision, oxidation, and surface treatments Z Laser techniques, including ablation

 - Physical chemistry
 - 82.20 Chemical kinetics and chemical reactions 82.30 Specific chemical reactions; reaction mechanisms
 - 82.40 Chemical kinetics and reactions: special regimes and techniques
 - Z Laser-induced reactions
 - 82.45 Electrochemistry and electrophoresis 82.50 Photochemistry and radiation chemistry

 - 82.65 Surface processes
 - 82.70 Dispersive systems
- 82.80 Chemical analysis and related physical methods of analysis
- Electromagnetic technology 84.60 Direct energy conversion and energy storage
 - Electrical and magnetic devices 85.30 Semiconductor devices
 - 85.40 Integrated electronics
 - 85.60 Photoelectric and optoelectronic devices and systems
- 85.80 Electrochemical, thermo-EM, and other devices
- 87 Biophysics (biological effects of radiation)

Contents of Applied Physics A 53

This listing presents the papers in alphabetical order of the first author, subdivided into the sections "Solids and Materials: Physical and Chemical Properties" and "Surfaces and Multilayers: Growth, Modification, and Integration". The Author Index that follows covers Applied Physics A and B, and is presented in tabular form. The names are listed in alphabetical order in the first column. The second and third columns contain the bibliographic data necessary to locate the paper. The issue is specified by the number separated from the volume number by a slash. The PACS numbers given in the fourth column may be used in conjunction with the PACS listing on the left to infer the topic of a paper.

Solids and Materials

Ben-Michael R., Tannhauser D.S.:

Visual observation of chemical diffusion in stabilized zirconia.

Appl. Phys. A 53/3, 185-188 (1991) PACS:66.30 71.55 Bertel E .:

Unoccupied electronic states in adsorbate systems.

Appl. Phys. A 53/5, 356-368 (1991) PACS:73.20 79.60

Brus L.:

Quantum crystallites and nonlinear optics.

Appl. Phys. A 53/6, 465-474 (1991) PACS: 42.65 Bugayev A., Kalt H., Kuhl J., Rinker M.:

Time-resolved spectroscopy of spontaneous luminescence of CdSxSe1-x quantum dots.

Appl. Phys. A 53/1, 75-80 (1991) PACS: 78.47 78.55 81.40

Chattopadhyay D.:

Two-dimensional electronic transport in In_{0.55}Ga_{0.47}As quantum wells. Appl. Phys. A 53/1, 35-42 (1991) PACS:72.20H 73.20 73.60

Chen W.M. Monemar B: Role of free carriers in the application of optically detected magnetic

resonance for studies of defects in silicon. Appl. Phys. A 53/2, 130-135 (1991) PACS:76.70H 72.20 71.55

Chen X.M., Canter K.F., Mills Jr. A.P.:

Investigation of positron reemission holography.

Appl. Phys. A 53/3, 203-208 (1991) PACS:42.40K 79.75 71.60 Combescot M.:

Theory of dressed-exciton.

Appl. Phys. A 53/6, 546-550 (1991) PACS:71.35

Dai G.H., Fu J., Liu Q.S.:

A program for the interactive analysis of positron lifetime spectra on personal computers with the aid of screen graphics.

Appl. Phys. A 53/4, 303-309 (1991) PACS:78.70

Ehrhardt A., Wettling W., Bett A.:

Transient photoluminescence decay study of minority carrier lifetime in GaAs heteroface solar cell structures.

Appl. Phys. A 53/2, 123-129 (1991) PACS:72.20J 78.55

Erdélyi G., Freitag K., Rummel G., Mehrer H.:

Volume and grain boundary diffusion of implanted 113 Sn in aluminium. Appl. Phys. A 53/4, 297-302 (1991) PACS:66.30J 61.80

Fabbri R., Servidori M., Solmi S., Frabboni S., Ottaviani G.P., Tonini R., Canteri R .:

Influence of implant dose and target temperature on crystal quality and junction depth of boron-doped silicon layers

Appl. Phys. A 53/3, 222-226 (1991) PACS:61.80 68.55

Properties of silicon-electrolyte junctions and their application to silicon characterization.

Appl. Phys. A 53/1, 8-19 (1991) PACS: 82.45 61.70 68.45

Gleitzer C., Nowotny J., Rekas M.:

Surface and bulk electrical properties of the hematite phase Fe₂O₃ Appl. Phys. A 53/4, 310-316 (1991) PACS:68.00 72.00 73.30 73.40

Greulich-Weber S., Görger A., Spaeth J.-M., Overhof H.: Iron-aluminum pairs in silicon.

Appl. Phys. A 53/2, 147-154 (1991) PACS:61.70S 61.70 71.55 76.30 Grünebaum D., Czekalla Th., Stolwijk N.A., Mehrer H., Yonenaga I.,

Diffusion and solubility of zinc in dislocation-free and plastically deformed silicon crystals.

Appl. Phys. A 53/1, 65-74 (1991) PACS:61.70W 61.70 64.75 66.30

Haegel N.M.:

Relaxation semiconductors: In theory and in practice. Appl. Phys. A 53/1, 1-7 (1991) PACS:72.20J 72.80 73.40

Haller E.E., Wolk J.A.:

Si DX centers in GaAs at large hydrostatic pressures.

Appl. Phys. A 53/1, 26-31 (1991) PACS:71.55E 78.30 63.20 61.70 Han T.P.J.Jaque F., Henderson B., Cockayne B., Crosbie M.J., Plant J.G. Luminescence from Ti2+ ions in LiF crystals.

Appl. Phys. A 53/3, 214-217 (1991) PACS:42.70 78.50 78.55

Han T.P.J., Jaque F., Trager-Cowan C., O'Donnell K.P., Henderson B.: Optical spectroscopy of Cr3+ ions in LiF single crystals. Appl. Phys. A 53/3, 209-213 (1991) PACS:42.70 78.50 78.55

Hasselbrink E .:

Photostimulated chemistry at the metal-adsorbate interface. Appl. Phys. A 53/5, 403-409 (1991) PACS:82.50G 82.20 82.65

Hellqvist E.-L., Nagesh V., Grimmeiss H.G., Kleverman M.: High-resolution absorption measurements in gold doped Si/Ge alloys. Appl. Phys. A 53/1, 43-46 (1991) PACS: 78.50G

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Jou C.J., Washburn J.: Relationship between T_e electronegativity differences in compound superconductors.

Appl. Phys. A 53/1, 87-93 (1991) PACS:74.70D 74.20

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Ultrafast nonlinear optical response and high density excitation effects of the stacking fault exciton in Bil3.

Appl. Phys. A 53/6, 480-490 (1991) PACS:71.70E 71.35 73.40

Kayanuma Y., Kuroda K.:

Quantum size effect of excitonic molecules in CuCl microcrystals. Appl. Phys. A 53/6, 475-479 (1991) PACS:73.20D 71.35 78.55 Khurgin J., Li S.:

Coulomb enhancement of the third-order nonlinearities in the mesoscopic semiconductor structures

Appl. Phys. A 53/6, 522-533 (1991) PACS:42.65 78.65

Kimura H., Kurosu T., Akiba Y., Iida M.:

A model for the occurrence of transient negative photoconductivity in silicon doped with gold.

Appl. Phys. A 53/3, 194-197 (1991) PACS:72.40 72.20 85.30 Knox W.H.:

Quantum wells for femtosecond optoelectronics applications. Appl. Phys. A 53/6, 503-513 (1991) PACS:71.35

Kobayashi T.:

Nonlinear optical materials.

Appl. Phys. A 53/6, 463 (1991) PACS:

Krühler W.:

Amorphous thin-film solar cells.

Appl. Phys. A 53/1, 54-61 (1991) PACS: 85.30 86.30 73.60 Land T.A., Michely T., Behm R.J., Hemminger J.C., Comsa G.: STM invesitigation of the adsorption and temperature dependent reac-

tions of ethylene on Pt(111).

Appl. Phys. A 53/5, 414-417 (1991) PACS: 82.65J 61.16

Lang M., Pensl G., Gebhard M., Achtziger N., Uhrmacher M.: Deep level transient spectroscopy on radioactive impurities: Demonstration for Si: 111 In.

Appl. Phys. A 53/2, 95-101 (1991) PACS:71.55 23.00 Leo K .:

Time-resolved four-wave-mixing of exciton transitions in GaAs/AlGaAs quantum wells: Novel effects in the lineshape. Appl. Phys. A 53/2, 118-122 (1991) PACS:42.50M 73.20

Liliental-Weber Z., Claverie A., Washburn J., Smith F., Calawa R.: Microstructure of annealed low-temperature-grown GaAs layers.

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Ion scattering spectroscopy and scanning tunneling microscopy: A powerful combination for surface structure analysis.

Appl. Phys. A 53/5, 388-402 (1991) PACS:68.35 61.16 61.70 Petrovic M.S., Suchocki A., Powell R.C., Cantwell G.:

Transmission second-harmonic generation in CdTe at 1.064 µm. Appl. Phys. A 53/6, 534-537 (1991) PACS:42.65 42.65 78.55

Poelsema B., Kunkel R., Nagel N., Becker A.F., Rosenfeld G., Verheij L.K., Comsa G.:

New phenomena in homoepitaxial growth of metals.

Appl. Phys. A 53/5, 369-376 (1991) PACS:68.55 68.35 61.16 Queisser G., Holzapfel W.B.:

Equation of state data for silicon-germanium alloys under pressures up

Appl. Phys. A 53/2,114-117 (1991) PACS:64.30 62.20 62.50

Radzimski Z.J., Zhou T.Q., Buczkowski A., Rozgonyi G.A.:

Electrical activity of dislocations: Prospects for practical utilization.

Appl. Phys. A 53/3, 189-193 (1991) PACS:61.70 81.40

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Fluid motion and molecular reorientation in a homeotropically orientated nematic liquid-crystal cell.

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Al_xGa_{1-x}As. Appl. Phys. A 53/3, 198-202 (1991) PACS:78.47 78.55 78.45

Schmiedeskamp B., Irmer N., David R., Heinzmann U.:

A new spin effect in photoemission with unpolarized light: Experimental evidence of spin polarized electrons in normal emission from Pt(111) and Au(111).

Appl. Phys. A 53/5, 418-421 (1991) PACS: 79.60C 71.25

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Schweizer T., Köhler K., Ganser P., Hülsmann A., Tasker P.:

Materials and device properties of pseudomorphic In. Ga_{1-x}As/ Al_{0.3}Ga_{0.7}As/GaAs high electron mobility transistors (0<x<0.5).

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Sharaf K.A.:

Switching and memory effects in semiconducting chalcogenide glasses Bi29 Tl35 Se36.

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Sieger D., Tietze-Jaensch H., Geick R., Zulehner W., Wright A.F.,

Geyer A. de:

Anisotropy and temperature dependence of small angle neutron scattering from silicon-oxide precipitates in silicon.

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A metastable electron trap in plastically deformed silicon. Appl. Phys. A 53/1, 62-64 (1991) PACS:61.70L 71.55

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A comparison of hydrogen incorporation and effusion in doped crystalline silicon, germanium and gallium arsenide.

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Szot K., Freiburg C., Pawelczyk M.:

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the surface of BaTiO₈.
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Effects of an inhomogeneous elliptic insert on the elastic field of an edge dislocation.

Appl. Phys. A 53/4, 285-291 (1991) PACS:61.70G 46.30 62.20

Tu K.N.:

Measurement of the interfacial energy between amorphous Si and crystalline Si.

Appl. Phys. A 53/1, 32-34 (1991) PACS:73.40

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Optical gate realization with thin CdS films.

Appl. Phys. A 53/6, 538-545 (1991) PACS:73.60F

Wagner P.:

Infrared absorption of interstitial oxygen in silicon at low temperatures. Appl. Phys. A 53/1, 20-25 (1991) PACS:78.30

Wang H., Steel D.G .:

High-resolution nonlinear laser spectroscopy of exciton relaxation in GaAs quantum wells.

Appl. Phys. A 53/6, 514-521 (1991) PACS:71.35 42.65 78.47 78.65

Weber L., Gmelin E .:

Transport properties of silicon

Appl. Phys. A 53/2, 136-140 (1991) PACS:72.80C 72.20 66.70

Westhof J., Meister G., Lodders F., Matzdorf R., Hennig R., Janssen E., Goldmann A .:

UV-photoelectron spectroscopy with lateral resolution.

Appl. Phys. A 53/5, 410-413 (1991) PACS: 79.60

Wiesendanger R., Bürgler D., Tarrach G., Schaub T., Hartmann U., Güntherodt H.-J., Shvets I.V., Coey J.M.D.:

Recent advances in scanning tunneling microscopy involving magnetic probes and samples.

Appl. Phys. A 53/5, 349-355 (1991) PACS:75.30P 61.16 75.25 75.50 Wöll Ch.:

Phonons on surfaces: The importance of structure and adsorbates.

Appl. Phys. A 53/5, 377-387 (1991) PACS:68.35J

Yamada A., Makita Y., Asakura H., Iida T., Kimura S., Matsumori T., Uekusa S.:

Anomalous photoluminescence and Raman scattering behavior in heavily Mg+ ion-implanted InP.

Appl. Phys. A 53/2, 102-108 (1991) PACS: 78.55C 78.30 81.20

Surfaces and Multilayers

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Structure formation in UV-laser ablated poly-ethyleneterephthalate (PET).

Appl. Phys. A 53/4, 330-331 (1991) PACS: 42.60 61.40 68.35

Banhart F., Bergmann R., Phillipp F., Bauser E.: Dislocation generation in silicon grown laterally over SiO2 by liquid phase epitaxy.

Appl. Phys. A 53/4, 317-323 (1991) PACS: 61.70J 81.10 73.40

Beauvais J., Lessard R.A., Galarneau P., Knystautas E.J.:

Structural and optical studies of the discontinuous behaviour of Te thin films subjected to He implantation.

Appl. Phys. A 53/3, 249-254 (1991) PACS: 42.30N 78.65 61.70 Berman M.R.:

Laser-assisted etching of gallium arsenide in chlorine at 308 nm. Appl. Phys. A 53/5, 442-448 (1991) PACS: 81.60C 82.65 82.50

Bouchier D., Bosseboeuf A.:

Angular distribution of sputtered atoms for low-energy nitrogen irradiation of silicon.

Appl. Phys. A 53/2, 179-184 (1991) PACS: 81.15C 79.20 82.65

Buck M., Eisert F., Fischer J., Grunze M., Träger F.:

Investigation of self-organizing thiol films by optical second harmonic generation and X-ray photoelectron spectroscopy. Appl. Phys. A 53/6, 551-555 (1991) PACS: 68.45 68.45 82.65

Constant M., Bellarbi A., Laureyns J., Vanbremeersch J., Lorriaux J.L.:

Electrical performance and Raman scattering characterization of GaAs planar photoconductors.

Appl. Phys. A 53/6, 567-572 (1991) PACS: 78.30 85.30 07.60 El-Shair H.T.

Electrical and optical properties of amorphous Te40 As38 Ge10 Si12 thin

Appl. Phys. A 53/2, 164-167 (1991) PACS: 78.00 65.00

Flint E.B., Messelhäuser J., Suhr H.:

Laser-induced CVD of rhodium.

Appl. Phys. A 53/5, 430-436 (1991) PACS: 42.60 81.15

Fukumura H., Mibuka N., Eura S., Masuhara H.:

Porphyrin-sensitized laser swelling and ablation of polymer films. Appl. Phys. A 53/3, 255-259 (1991) PACS: 81.60J 82.50

Gaiduk P.I., Larsen A.N.;

Platinum-silicide formation during rapid thermal annealing: Dependence on substrate orientation and pre-implanted impurities. Appl. Phys. A 53/2, 168-171 (1991) PACS: 73.60A

Garrido C., Bergh H. van den:

Temperature effect on photolytic deposition of platinum ohmic contacts and Schottky diodes.

Appl. Phys. A 53/3, 265-272 (1991) PACS: 81.15Z 82.40

González Y., Mazuelas A., Recio M., Gonzáles L., Armelles G., Briones F .:

Determination of in-depth thermal strain distribution in molecular beam epitaxy GaAs on Si.

Appl. Phys. A 53/3, 260-264 (1991) PACS: 68.55 62.20 78.65

Hassel B.A. van, Burggraaf A.J.:

Microstructure and thermal stability of Fe, Ti, and Ag implanted yttriastabilized zirconia.

Appl. Phys. A 53/2, 155-163 (1991) PACS: 61.70T 66.30

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Growth and melting behaviour of thin In films on Ge(100).

Appl. Phys. A 53/4, 324-329 (1991) PACS: 64.70D 68.55 76.80

Lavoie C., Meunier M., Izquierdo R., Boivin S., Desjardins P.: Large area excimer laser induced deposition of titanium from titanium

tetrachloride.

Appl. Phys. A 53/4, 339-342 (1991) PACS: 68.55G 82.50 82.65 Lehmann O., Stuke M.:

Generation of three-dimensional free-standing micro-objects by laser chemical processing.

Appl. Phys. A 53/4, 343-345 (1991) PACS: 81.15G 81.20 81.60

Li-Jie, Schreck E., Dransfeld K.:

Fast polarization reversal in thin copolymer films of vinylidene fluoridetrifluoroethylene.

Appl. Phys. A 53/5, 457-461 (1991) PACS: 77.30 77.50 77.80

Lim A.S., Atrens A.:

ESCA studies of Si-Fe alloys.

Appl. Phys. A 53/3, 273-281 (1991) PACS: 68.40 81.60

Li N., Wu Q.-D.:

Electronic conduction properties of silver particles in cesium oxide. Appl. Phys. A 53/2, 172-178 (1991) PACS: 72.00 72.60 73.30 74.40 Milne R.H., Fabian D.J.:

Auger spectra of aluminium and magnesium induced by caesium-ion bombardment.

Appl. Phys. A 53/6, 573-576 (1991) PACS: 79.20F 79.20 Pidduck A.J., Nayar V.:

Optical imaging of microroughness on polished silicon wafers. Appl. Phys. A 53/6, 556-561 (1991) PACS: 68.25

Schultze V., Wagner M.:

Blow-off of aluminium films.

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Schwab P., Heitz J., Proyer S., Bäuerle D.:

Femtosecond-excimer-laser patterning of YBa₂Cu₃O₇ films. Appl. Phys. A 53/3, 282-283 (1991) PACS: 61.80 42.55 74.70

Sokolowski-Tinten K., Schulz H., Bialkowski J., Linde D von der: Two distinct transitions in ultrafast solid-liquid phase transformations of GaAs.

Appl. Phys. A 53/3, 227-234 (1991) PACS: 64.70D 71.30

Stitzl H., Krötz G., Müller G.:

Accumulation and annealing of implantation damage in a-Si:H. Appl. Phys. A 53/3, 235-240 (1991) PACS: 61.40 61.80 72.20

Weisbrod U., Gutschke R., Knoth J., Schwenke H.:

Total reflection X-ray fluorescence spectrometry for quantitative surface and layer analysis.

Appl. Phys. A 53/5, 449-456 (1991) PACS: 07.85 68.35

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Appl. Phys. A 53/5, 437-441 (1991) PACS: 78.65F 73.20 78.55